

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : Surmax® CS-727MA
Other means of identification : Surfactant

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture : Detergent
Surfactant

1.3. Details of the supplier of the safety data sheet

PCC Chemax, Inc.
30 Old Augusta Road
Piedmont, 29673 - USA
T 1-864-277-7000 - F 1-864-277-7807
cpatterson@pcc-chemax.com - www.pcc-chemax.com

1.4. Emergency telephone number

Emergency number : 1-800-424-9300 (CHEMTREC)
+1-703-527-3887 Outside United States

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Irrit. 2 H315
Eye Dam. 1 H318

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



GHS05

Signal word (GHS-US) : Danger
Hazard statements (GHS-US) : H315 - Causes skin irritation
H318 - Causes serious eye damage
Precautionary statements (GHS-US) : P264 - Wash hands and forearms thoroughly after handling
P280 - Wear eye protection, face protection, protective gloves, protective clothing
P302+P352 - If on skin: Wash with plenty of soap, water
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 - Immediately call a POISON CENTER, a doctor
P321 - Specific treatment (see First aid measures on this label)
P332+P313 - If skin irritation occurs: Get medical advice/attention
P362 - Take off contaminated clothing and wash before reuse

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	Classification (GHS-US)
Water	(CAS No) 7732-18-5	46 - 54	Not classified
1-Propanaminium, 3-butoxy-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt	(CAS No) 108797-84-8	18.75 - 22.5	Eye Dam. 1, H318
1-Propanaminium, 3-[(2-ethylhexyl)oxy]-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt	(CAS No) 108797-85-9	7.5 - 15	Eye Dam. 1, H318
Triethanolamine	(CAS No) 102-71-6	10.3	Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H335
Polyphosphoric acids, esters with triethanolamine	(CAS No) 68131-71-5	2.7	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
- First-aid measures after skin contact : Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact : Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
- First-aid measures after ingestion : If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries after inhalation : May cause respiratory irritation.
- Symptoms/injuries after skin contact : Causes skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye damage.
- Symptoms/injuries after ingestion : Ingestion may cause nausea, vomiting and diarrhea.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Sand. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

- Explosion hazard : Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

5.3. Advice for firefighters

- Firefighting instructions : Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe.

6.1.1. For non-emergency personnel

- Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

- For containment : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible.
- Methods for cleaning up : Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. Store away from other materials.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Additional hazards when processed : Avoid contact with skin, eyes and clothing.
- Precautions for safe handling : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Use personal protective equipment as required.
- Hygiene measures : Wash hands and forearms thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.
- Incompatible products : Strong oxidizers.
- Storage area : Store, if possible, in a cool, well ventilated place away from incompatible materials.
- Special rules on packaging : Handle unclean empty containers as full ones.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Surmax® CS-727MA		
ACGIH	Not applicable	
OSHA	Not applicable	
1-Propanaminium, 3-butoxy-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt (108797-84-8)		
ACGIH	Not applicable	
OSHA	Not applicable	
1-Propanaminium, 3-[(2-ethylhexyl)oxy]-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt (108797-85-9)		
ACGIH	Not applicable	
OSHA	Not applicable	
Water (7732-18-5)		
ACGIH	Not applicable	
OSHA	Not applicable	
Triethanolamine (102-71-6)		
ACGIH	ACGIH TWA (mg/m³)	5 mg/m³
OSHA	Not applicable	
Polyphosphoric acids, esters with triethanolamine (68131-71-5)		
ACGIH	Not applicable	
OSHA	Not applicable	

8.2. Exposure controls

- Appropriate engineering controls : Local exhaust and general ventilation must be adequate to meet exposure standards.
- Personal protective equipment : Avoid all unnecessary exposure.
- Hand protection : Wear suitable gloves resistant to chemical penetration.
- Eye protection : Chemical goggles.

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Skin and body protection	: Wear suitable protective clothing.
Respiratory protection	: Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Other information	: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Appearance	: Clear.
Color	: amber
Odor	: Slight
Odor threshold	: No data available
pH	: 4.2 - 6.5 @ 5% in aqueous solution
Melting point	: No data available
Freezing point	: No data available
Boiling point	: 100 °C
Flash point	: > 93.3 °C Open cup
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: No data available
Explosion limits	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Vapor pressure	: No data available
Relative density	: No data available
Relative vapor density at 20 °C	: No data available
Specific gravity / density	: 1.14 g/cm³
Solubility	: Soluble in water. Solubility in water of component(s) of the mixture : • Sodium chloride: 370 g/l (at 20 °C) • Sodium acetate: 365 g/l (at 20 °C)
Log Pow	: No data available
Log Kow	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available

9.2. Other information

VOC content	: 46 - 54 Water
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SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon dioxide. Carbon monoxide. Nitrogen oxides. Phosphorous oxide. Sulphur oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Surmax® CS-727MA	
Additional information	Substance not yet tested completely
Water (7732-18-5)	
LD50 oral rat	> 90 ml/kg
Triethanolamine (102-71-6)	
LD50 oral rat	4190 mg/kg
LD50 dermal rabbit	> 20 ml/kg
ATE US (oral)	4190.000 mg/kg body weight

Skin corrosion/irritation	: Causes skin irritation. pH: 4.2 - 6.5 @ 5% in aqueous solution
Serious eye damage/irritation	: Causes serious eye damage. pH: 4.2 - 6.5 @ 5% in aqueous solution
Respiratory or skin sensitization	: Not classified (Lack of data)
Germ cell mutagenicity	: Not classified (Lack of data)
Carcinogenicity	: Not classified (Lack of data)

Triethanolamine (102-71-6)	
IARC group	3 - Not classifiable
National Toxicology Program (NTP) Status	1 - Evidence of Carcinogenicity

Reproductive toxicity	: Not classified (Lack of data)
Specific target organ toxicity (single exposure)	: Not classified (Lack of data)
Specific target organ toxicity (repeated exposure)	: Not classified (Lack of data)
Aspiration hazard	: Not classified (Lack of data)
Symptoms/injuries after inhalation	: May cause respiratory irritation.
Symptoms/injuries after skin contact	: Causes skin irritation.
Symptoms/injuries after eye contact	: Causes serious eye damage.
Symptoms/injuries after ingestion	: Ingestion may cause nausea, vomiting and diarrhea.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general	: This material has not been tested for environmental effects.
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Triethanolamine (102-71-6)	
LC50 fish 1	10600 - 13000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [flow-through])
LC50 fish 2	> 1000 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])

12.2. Persistence and degradability

Surmax® CS-727MA	
Persistence and degradability	Not established.

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Triethanolamine (102-71-6)

Persistence and degradability	Readily biodegradable.
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12.3. Bioaccumulative potential

Surmax® CS-727MA

Bioaccumulative potential	Not established.
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Triethanolamine (102-71-6)

BCF fish 1	< 3.9
Log Pow	-2.53

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on the global warming : No known ecological damage caused by this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
Additional information	: Clean up even minor leaks or spills if possible without unnecessary risk.
Ecology - waste materials	: Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT
Not regulated for transport

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Surmax® CS-727MA

Listed on the United States TSCA (Toxic Substances Control Act) inventory

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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1-Propanaminium, 3-butoxy-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt (108797-84-8)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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Water (7732-18-5)

Other information	No supplementary information available
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Polyphosphoric acids, esters with triethanolamine (68131-71-5)

SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
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15.2. International regulations

CANADA

Surmax® CS-727MA	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
1-Propanaminium, 3-butoxy-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt (108797-84-8)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
1-Propanaminium, 3-[(2-ethylhexyl)oxy]-2-hydroxy-N-(2-hydroxy-3-sulfopropyl)-N,N-dimethyl-, inner salt (108797-85-9)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
Water (7732-18-5)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria
TEA, 99% (102-71-6)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria Listed on the Canadian IDL (Ingredient Disclosure List)
Polyphosphoric acids, esters with triethanolamine (68131-71-5)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

EU-Regulations

National regulations

Surmax® CS-727MA	
Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China)	

15.3. US State regulations

Triethanolamine (102-71-6)	
U.S. - Massachusetts - Right To Know List	
U.S. - Minnesota - Hazardous Substance List	
U.S. - New Jersey - Right to Know Hazardous Substance List	
U.S. - Pennsylvania - RTK (Right to Know) List	

SECTION 16: Other information

Other information : None.

Freight Classifications (National Motor Freight Classification) : Cleaning Compound, NOI, Item 48580, Sub 3, Class 55.

Full text of H-phrases:

Eye Dam. 1	Serious eye damage/eye irritation Category 1
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Eye Irrit. 2B	Serious eye damage/eye irritation Category 2B
Skin Irrit. 2	Skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H318	Causes serious eye damage
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012) - Custom

This information is based on our current knowledge and it is intended to describe the product for the purposes of health, safety, and environmental requirements only. No warranty, as to the accuracy, completeness, or adequacy of the information contained herein is either expressed or implied. Users must determine individually, by testing or otherwise, the suitability of this product for their purposes, including mixing with other products. The revision of the document supersedes all those previously issued for the product.